



OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/088,549A

DATE: 12/13/2002

TIME: 13:47:03

Input Set : A:\DEBE007US.txt

Output Set: N:\CRF4\12132002\J088549A.raw

P.6

C--> 3 <110> APPLICANT: Erik Nielsen  
 4 Savvas Chritophoridis  
 5 Carol Murphy  
 6 Marino Zerial  
 7 Stefano De Renzis  
 9 <120> TITLE OF INVENTION: ASSAY TO DETECT SUBSTANCES USEFUL FOR THERAPY  
 11 <130> FILE REFERENCE: DEBE:007US  
 13 <140> CURRENT APPLICATION NUMBER: 10/088,549A  
 14 <141> CURRENT FILING DATE: 2002-08-02  
 16 <150> PRIOR APPLICATION NUMBER: PCT/EP 00/09130  
 17 <151> PRIOR FILING DATE: 2000-09-18  
 19 <150> PRIOR APPLICATION NUMBER: EP 99 118 385.6  
 20 <151> PRIOR FILING DATE: 1999-09-16  
 22 <160> NUMBER OF SEQ ID NOS: 16  
 24 <170> SOFTWARE: PatentIn Ver. 2.1  
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 27 <211> LENGTH: 3510  
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 43 ccgctacata aagccatcaa agtggagaga gaagacgtgg tcttcctgta tctgattgaa 720  
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ENTERED

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93 &lt;210&gt; SEQ ID NO: 2

94 &lt;211&gt; LENGTH: 1169

95 &lt;212&gt; TYPE: PRT

96 &lt;213&gt; ORGANISM: Homo sapiens

98 &lt;400&gt; SEQUENCE: 2

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100 1 5 10 15
102 Arg Gln Glu Tyr Val Lys Leu Gln Lys Lys Leu Ala Glu Thr Glu Lys
103 20 25 30
105 Arg Cys Ala Leu Leu Ala Ala Gln Ala Asn Lys Glu Ser Ser Ser Glu
106 35 40 45
108 Ser Phe Ile Ser Arg Leu Leu Ala Ile Val Ala Asp Leu Tyr Glu Gln
109 50 55 60

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111 Glu Gln Tyr Ser Asp Leu Lys Ile Lys Val Gly Asp Arg His Ile Ser
112 65 70 75 80
114 Ala His Lys Phe Val Leu Ala Ala Arg Ser Asp Ser Trp Ser Leu Ala
115 85 90 95
117 Asn Leu Ser Ser Thr Lys Glu Leu Asp Leu Ser Asp Ala Asn Pro Glu
118 100 105 110
120 Val Thr Met Thr Met Leu Arg Trp Ile Tyr Thr Asp Glu Leu Glu Phe
121 115 120 125
123 Arg Glu Asp Asp Val Phe Leu Thr Glu Leu Met Lys Leu Ala Asn Arg
124 130 135 140
126 Phe Gln Leu Gln Leu Leu Arg Glu Arg Cys Glu Lys Gly Val Met Ser
127 145 150 155 160
129 Leu Val Asn Val Arg Asn Cys Ile Arg Phe Tyr Gln Thr Ala Glu Glu
130 165 170 175
132 Leu Asn Ala Ser Thr Leu Met Asn Tyr Cys Ala Glu Ile Ile Ala Ser
133 180 185 190
135 His Trp Asp Asp Leu Arg Lys Glu Asp Phe Ser Ser Met Ser Ala Gln
136 195 200 205
139 Leu Leu Tyr Lys Met Ile Lys Ser Lys Thr Glu Tyr Pro Leu His Lys
140 210 215 220
142 Ala Ile Lys Val Glu Arg Glu Asp Val Val Phe Leu Tyr Leu Ile Glu
143 225 230 235 240
145 Met Asp Ser Gln Leu Pro Gly Lys Leu Asn Glu Ala Asp His Asn Gly
146 245 250 255
148 Asp Leu Ala Leu Asp Leu Ala Leu Ser Arg Arg Leu Glu Ser Ile Ala
149 260 265 270
151 Thr Thr Leu Val Ser His Lys Ala Asp Val Asp Met Val Asp Lys Ser
152 275 280 285
154 Gly Trp Ser Leu Leu His Lys Gly Ile Gln Arg Gly Asp Leu Phe Ala
155 290 295 300
157 Ala Thr Phe Leu Ile Lys Asn Gly Ala Phe Val Asn Ala Ala Thr Leu
158 305 310 315 320
160 Gly Ala Gln Glu Thr Pro Leu His Leu Val Ala Leu Tyr Ser Ser Lys
161 325 330 335
163 Lys His Ser Ala Asp Val Met Ser Glu Met Ala Gln Ile Ala Glu Ala
164 340 345 350
166 Leu Leu Gln Ala Gly Ala Asn Pro Asn Met Gln Asp Ser Lys Gly Arg
167 355 360 365
169 Thr Pro Leu His Val Ser Ile Met Ala Gly Asn Glu Tyr Val Phe Ser
170 370 375 380
172 Gln Leu Leu Gln Cys Lys Gln Leu Asp Leu Glu Leu Lys Asp His Glu
173 385 390 395 400
175 Gly Ser Thr Ala Leu Trp Leu Ala Val Gln His Ile Thr Val Ser Ser
176 405 410 415
178 Asp Gln Ser Val Asn Pro Phe Glu Asp Val Pro Val Val Asn Gly Thr
179 420 425 430
181 Ser Phe Asp Glu Asn Ser Phe Ala Ala Arg Leu Ile Gln Arg Gly Ser
182 435 440 445
183 His Thr Asp Ala Pro Asp Thr Ala Thr Gly Asn Cys Leu Leu Gln Arg

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187 465      470      475      480
189 Gly Ala His Val Asn His Arg Asn Lys Trp Gly Glu Thr Pro Leu His
190      485      490      495
192 Thr Ala Cys Arg His Gly Leu Ala Asn Leu Thr Ala Glu Leu Leu Gln
193      500      505      510
195 Gln Gly Ala Asn Pro Asn Leu Gln Thr Glu Glu Ala Leu Pro Leu Pro
196      515      520      525
198 Lys Glu Ala Ala Ser Leu Thr Ser Leu Ala Asp Ser Val His Leu Gln
199      530      535      540
201 Thr Pro Leu His Met Ala Ile Ala Tyr Asn His Pro Asp Val Val Ser
202 545      550      555      560
204 Val Ile Leu Glu Gln Lys Ala Asn Ala Leu His Ala Thr Asn Asn Leu
205      565      570      575
207 Gln Ile Ile Pro Asp Phe Ser Leu Lys Asp Ser Arg Asp Gln Thr Val
208      580      585      590
210 Leu Gly Leu Ala Leu Trp Thr Gly Met His Thr Ile Ala Ala Gln Leu
211      595      600      605
213 Leu Gly Ser Gly Ala Ala Ile Asn Asp Thr Met Ser Asp Gly Gln Thr
214      610      615      620
216 Leu Leu His Met Ala Ile Gln Arg Gln Asp Ser Lys Ser Ala Leu Phe
217 625      630      635      640
219 Leu Leu Glu His Gln Ala Asp Ile Asn Val Arg Thr Gln Asp Gly Glu
220      645      650      655
222 Thr Ala Leu Gln Leu Ala Ile Arg Asn Gln Leu Pro Leu Val Val Asp
223      660      665      670
225 Ala Ile Cys Thr Arg Gly Ala Asp Met Ser Val Pro Asp Glu Lys Gly
226      675      680      685
227 Asn Pro Pro Leu Trp Leu Ala Leu Ala Asn Asn Leu Glu Asp Ile Ala
228      690      695      700
230 Ser Thr Leu Val Arg His Gly Cys Asp Ala Thr Cys Trp Gly Pro Gly
231 705      710      715      720
233 Pro Gly Gly Cys Leu Gln Thr Leu Leu His Arg Ala Ile Asp Glu Asn
234      725      730      735
236 Asn Glu Pro Thr Ala Cys Phe Leu Ile Arg Ser Gly Cys Asp Val Asn
237      740      745      750
239 Ser Pro Arg Gln Pro Gly Ala Asn Gly Glu Gly Glu Glu Ala Arg
240      755      760      765
242 Asp Gly Gln Thr Pro Leu His Leu Ala Ala Ser Trp Gly Leu Glu Glu
243      770      775      780
245 Thr Val Gln Cys Leu Leu Phe Gly Ala Asn Val Asn Ala Gln Asp
246 785      790      795      800
248 Ala Glu Gly Arg Thr Pro Ile His Val Ala Ile Ser Ser Gln His Gly
249      805      810      815
251 Val Ile Ile Gln Leu Leu Val Ser His Pro Asp Ile His Leu Asn Val
252      820      825      830
254 Arg Asp Arg Gln Gly Leu Thr Pro Phe Ala Cys Ala Met Thr Phe Lys
255      835      840      845

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261 865      870      875      880
263 Asn Ser Asp Ile Glu Ser Val Leu Phe Leu Ile Ser Val His Ala Asn
264      885      890      895
266 Val Asn Ser Arg Val Gln Asp Ala Ser Lys Leu Thr Pro Leu His Leu
267      900      905      910
269 Ala Val Gln Ala Gly Ser Glu Ile Val Arg Asn Leu Leu Ala
270      915      920      925
271 Gly Ala Lys Val Asn Glu Leu Thr Lys His Arg Gln Thr Ala Leu His
272      930      935      940
274 Leu Ala Ala Gln Gln Asp Leu Pro Thr Ile Cys Ser Val Leu Leu Glu
275 945      950      955      960
277 Asn Gly Val Asp Phe Ala Ala Val Asp Glu Asn Gly Asn Asn Ala Leu
278      965      970      975
280 His Leu Ala Val Met His Gly Arg Leu Asn Asn Ile Arg Val Leu Leu
281      980      985      990
283 Thr Glu Cys Thr Val Asp Ala Glu Ala Phe Asn Leu Arg Gly Gln Ser
284      995      1000      1005
286 Pro Leu His Ile Leu Gly Gln Tyr Gly Lys Glu Asn Ala Ala Ala Ile
287      1010      1015      1020
289 Phe Asp Leu Phe Leu Glu Cys Met Pro Gly Tyr Pro Leu Asp Lys Pro
290 1025      1030      1035      1040
292 Asp Ala Asp Gly Ser Thr Val Leu Leu Leu Ala Tyr Met Lys Gly Asn
293      1045      1050      1055
295 Ala Asn Leu Cys Arg Ala Ile Val Arg Ser Gly Ala Arg Leu Gly Val
296      1060      1065      1070
298 Asn Asn Asn Gln Gly Val Asn Ile Phe Asn Tyr Gln Val Ala Thr Lys
299      1075      1080      1085
301 Gln Leu Leu Phe Arg Leu Leu Asp Met Leu Ser Lys Glu Pro Pro Trp
302      1090      1095      1100
304 Cys Asp Gly Ser Tyr Cys Tyr Glu Cys Thr Ala Arg Phe Gly Val Thr
305 1105      1110      1115      1120
307 Thr Arg Lys His His Cys Arg His Cys Gly Arg Leu Leu Cys His Lys
308      1125      1130      1135
310 Cys Ser Thr Lys Glu Ile Pro Ile Ile Lys Phe Asp Leu Asn Lys Pro
311      1140      1145      1150
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315 Ser
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326 gcaaacaagg agagcagcag cgagtccttc atcagccgctc tgctggccat cgtggcagac 180

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RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/088,549A

DATE: 12/13/2002  
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Input Set : A:\DEBE007US.txt  
Output Set: N:\CRF4\12132002\J088549A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:6; Xaa Pos. 398,488

## VERIFICATION SUMMARY

DATE: 12/13/2002

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Input Set : A:\DEBE007US.txt

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L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:729 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:384

L:747 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:480